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OCTOBER 26, 1924

No. 16

The Second Year of the N.A.A.

DURING the first year of the N.A.A., American made certain constructive suggestions that were acted upon in the St. Louis Convention. Last year, the feeling has been general that the activities of the Association have been too local and that differences among groups have held back the development of the organization as the national leader of the aeronautical movement. Happily, the Convention at Dayton has recognized the existence of the situation and everyone seems to be completely satisfied with the action taken there.

In spite of such enthusiastic advice, the greatest credit must be given to Mr. Patterson for adhering to a fixed policy and bravely seeing it through. Though not the president, though no seeking of his own, he accepted what he considered good guidance and wholeheartedly gave of his time and talent to further the interests of aviation. Fired by an enthusiasm to make Dayton, now calling itself "The Air City" a great aeronautical center, it was only natural that the national and local interests should be ardently interwoven, but everyone with an ounce of pride for his native city can understand the situation. Mr. Patterson through the experience he has secured during the last year has gained a point of view that should make him of great value to American aviation.

The membership and chapter growth while impressive in numbers, when analyzed, showed very little progress for such a large expenditure. A growth from two thousand to seven thousand seven large but as twenty-one hundred are from St. Joseph, thirteen hundred from Dayton and five hundred from the National Club Register Company, the real growth in the entire country is about eleven hundred members. If the required strength of chapters had not been reduced from ten hundred to twenty-five members there would have been no growth whatever in the chapter roll. These facts are pointed out, not in any spirit of criticism but to indicate that the method of securing members and organizing chapters was faulty and should be modified in the future problems to be seriously considered. Next year's membership growth will show whether the two large chapters in Dayton and St. Joseph will dominate the N.A.A. in point of numbers and continue to report again as a desert of weak chapters and scattered members.

In considering the Treasurer's report full credit should be given to Mr. Joseph for the ten thousand dollars that he placed in membership dues in a magnificent effort. This, alone, changed the whole membership and financial situation and it should receive full recognition. But more important was the voluntary effort of the St. Joseph delegates and on the future of the N.A.A. Although it was postponed only after a long and better fight to cast its full

weight strength, the alignment thus made will always deserve the credit for the excellent outcome of the meeting and the smoothness of the carrying out of the program. We salute Mr. Joseph and give it the praise it deserves from all who are interested in the welfare of the N.A.A.

A better choice of officers could not have been made. Messrs. Cobbs, Schneider, White and Cuddy, all pilots, all well known and all having the confidence of everyone will have a united support and enthusiastic approval. They will shape the new policies, they will have the management of the affairs of the association. They have already indicated their desire to serve the whole membership and to make the N.A.A. truly national. A conservative budget has been adopted and they have agreed to study it. Mr. Cobbs, the new president, has moved to Washington where he will live during the year. This will make Headquarters the center of all the Association's activity as it should be.

Aviation looks forward this year to total substantial progress in the N.A.A. and expects a very sincere conviction that the N.A.A. officers intend to be truly representative of the whole membership.

The Dirigible Triumphs

REGARDLESS of the more conservative opinion as to the utility of rigid dirigibles as warships or as naval aerial platforms, the ZEP and the Riesenluftschiff are filling the popular mind and stimulating aeronautical interest in a most successful way. The Riesenluftschiff's trip to the Pacific Coast had hardly been completed when the story of the ZEP could be heard because on its five thousand mile run ship voyagers from Friedrichshafen, Germany, Europe as well as the Americans were carried to the highest peaks of civilization by the three day voyage or to be exact its Atlantic crossing in eighty-one hours and seventeen minutes.

The beauty of the German airship as the crossed over New York City on a brilliant sunny morning was answered in six previous aeronautical ships the metropolitan area had witnessed as airship people imagined her a dumb droning war vessel with all sorts of unsupportable possibilities while others saw as the imperial air levitation a solution of present and air transoceanic transportation.

The rapid progress of airship in its own field for the "Riesenluftschiff" is related as first of all actual advance with varying criticism. At the time when the United States is the only country in the world with any airplane with navigation, it is not opportune to become too analytical. The sharing of the joy of the career of both the Riesenluftschiff and the ZEP should induce a spirit of grateful appreciation of the progress and insight of our aeronautical authorities.

The Second N. A. A. National Convention

A Circumstantial Account of its Proceedings

The second annual gathering of delegates and members of the National Aeronautics Association was held at Dayton on Oct. 25 and 26.

On Wednesday, Oct. 25, the Board of Governors held its annual meeting, and members of the new districts elected representatives on committees. The first business session was held on Thursday, Oct. 25, after which the convention met and prepared their reports. After the annual banquet, the concluding business sessions were held at which resolutions were passed and officers were elected for the coming year.

Heretofore, AVIATION has printed a photographic report of the convention, but owing to the amount of reporting to be done, the original report has not been received in time for this issue. This account is therefore merely a series of impressions rather than a verbatim report.

The Active St. Joseph Chamber

On arrival at Dayton, delegates were pleasantly surprised with the news that St. Joseph, Mo., under the leadership of Capt. Wadley had secured 2400 members in a thirty day campaign, and that eleven foreign delegates had come to the Convention. Almost immediately the air was filled with all kinds of rumors of a heated argument over the representation of St. Joseph at the meeting of Governors. St. Joseph claimed that it was entitled to 10 delegates and that many votes. Inasmuch as it was impossible for all the delegates to come such a long distance, St. Joseph felt that they should have full representation, proportionate to their membership strength. The Governors decided against giving St. Joseph full representation. This caused the first outbreak of the meeting.

Arrived at the St. Joseph representative claims was the president's satisfaction. F. B. Patterson had been advised, very unfortunately, to permit his name to be considered for reelection with the understanding that Godfrey Cabot would be elected vice president. Mr. Patterson, so it was advised, was to remain president until Jan. 2 and then return in favor of Mr. Cabot. The St. Joseph delegation was not favorable to this plan, nor were the supporters of the candidacy of Mr. Cabot. The whole matter was taken to the floor of the convention at the first session. After a discussion, St. Joseph was given the representation it desired.

At the second morning session a similar controversy was settled. The Resolution Committee had reported favorably on an amendment to the Constitution which would prevent the Convention or by-law being amended by the Board of Governors between annual conventions. After being acted upon favorably, reconsideration was ordered and the amendment was lost.

Election of Officers

The Nominating Committee met after learning that Mr. Patterson had decided not to be a candidate for reelection made the following nominations which were unanimously elected at the Friday morning meeting: President, Godfrey L. Cabot, Vice President, W. W. Schneider, Secretary, Edward Wadley, Treasurer, Benjamin F. Gustis.

The various other committees held meetings. The Rules Committee had a very elaborate set of Convention Rules and Resolutions prepared which proved to be very helpful in expediting the work of the Convention. The Resolutions Committee prepared a series of resolutions some of which will be printed in a later issue. They were primarily of an appreciative character.

The discussion of the Wadley Bill was so skillfully handled that no movement on the floor of the Convention was needed, the matter being left to the jurisdiction of the Board of Governors and the Legislative Committee. This was perhaps the best way of handling this all important subject as there were explosives planted all along its path.

The Annual Banquet was held in the Welfare Building of the National Cash Register Company and a thousand were present. The feature of the evening was the presentation of the new Armed the World Flight was given by Governor by Mr. Patterson. Orville Wright was given the highest honor but did not speak.

America Should Wake Up

Address were made by Maj. Gen. Milton M. Patrick, chief of the United States Army Air Service, Brig. Gen. William Mitchell, assistant chief of the Air Service, Hon. Dwight L. Davis, assistant secretary of war, Hon. Frank B. Willis, United States senator from Ohio, Frederick B. Patterson, president of the National Aeronautics Association, Charles F. Kettering, inventor, and Meyer F. D. Hale, who represented the association delegates, firm and efforts to Dayton. Mayor Hale welcomed the aviation people to Dayton in a brief address, in which he praised the speed and effect of those who are always to keep America ahead of the world. He introduced Mr. Kettering as hostmaster, who made a short but interesting Mr. Patterson, president of the association.

"European nations have been quick to grasp the opportunities of aviation and are far ahead of the United States in commercial airplanes," the Patterson said. His speech was aimed directly, studying the situation in various foreign countries.

"These commercial planes are so quickly converted into war machines. The American people need to make up to this realization. The last we have is the Air Mail Service. It keeps the airplane in use not only for mail, but for express and passenger service."

What the World Flight Preced

The first big demonstration of the coming age during the speech of Mr. Davis, while the assistant secretary of war, said that all the world's great delight in honoring the two men who flew the first airplane in 1903, and that it was in favor of world flight. At the mention of the words, "world flight," the hundreds of banquets broke into an uproar of applause and cheering. The aviators continued for more than a minute and were followed quickly afterwards by a similar demonstration when Orville Wright was introduced as the "father of aviation."

Mr. Davis was followed by General Patrick, who briefly presented the program of aviation. The highest ambition of the United States Army Air Service has been accomplished," General Patrick said in expressing appreciation of the government to the world there for the successful demonstration of their gliding wing trip.

"The popular view that this flight was a 'stunt' is entirely wrong," he explained. "It is a proof that aviation has a wonderful future and will have a profound influence on the world. The earlier flights, although the contemporary flights and other record-breaking flights were considered great, but the accomplishment of the world's first airplane trip."

A Tribute to the Wrights

General Patrick also spoke highly of the men who planned all of the details of the flight and named them out. He pointed out that the success of the venture was attributed to three things. We had the men who could see and had the planes of our own make that could be flown and we had an expert representation for the detail work.

"It has been only a few years since there were only two men in the world who knew that machines could be flown in the sky," General Patrick said in praising Wilbur and Orville Wright. He also mentioned Miss Katherine Wright, their sister, who is given a large amount of credit for her interest and faith in her brothers' work.

"The development of the airplane from the first one, two

by the Wrights has been phenomenal," he went on. "The airplane has reached the stage where it has been used in a deadly weapon of war as well as an instrument of peace-time along with many other inventions."

"The world has been here ever since that has seen men in a flying machine, looking. They viewed the industrial revolution and their machine with awe. The machine will be revolutionizing. Nations have been brought closer together by thousands of miles. No distance is now too great to be traversed and no country is now too small from which the air is in use of war."

"Americans must wake up to the realization that the only way to repel a hostile attack from the air is with an adequate air force. When we need it, we will need it. And Great Britain have been made toward a defense program, had a crash field it was open. The National Aeronautics Association is the best means for keeping the facts known. It is already doing good work to that end."

General Patrick closed his remarks with a tribute to the world fairs.

Make America First in the Air

The principal address of the banquet, including a message from President Coolidge, was delivered by Brigadier General Mitchell, with the concluding address was given by Senator Willis.

"I propose to be my utmost to make America first in the air," Senator Willis continued, drawing both heavy applause from the assembled guests. "I conceived his talk should be on the wall of the dining hall bearing the inscription 'Advance the Science of Aviation.' He compared the feat of the world's first to Magellan's trip around the world in the first ship, Columbus' discovery of America, the Cabot's dis-



Ralph Wilbur Schneider, Vice President National Aeronautics Association

SCHNEIDER, RALPH WILBUR, 1921-22, President National Aeronautics Association, 1921-22, Vice President, 1922-23, President, 1923-24, President, 1924-25, President, 1925-26, President, 1926-27, President, 1927-28, President, 1928-29, President, 1929-30, President, 1930-31, President, 1931-32, President, 1932-33, President, 1933-34, President, 1934-35, President, 1935-36, President, 1936-37, President, 1937-38, President, 1938-39, President, 1939-40, President, 1940-41, President, 1941-42, President, 1942-43, President, 1943-44, President, 1944-45, President, 1945-46, President, 1946-47, President, 1947-48, President, 1948-49, President, 1949-50, President, 1950-51, President, 1951-52, President, 1952-53, President, 1953-54, President, 1954-55, President, 1955-56, President, 1956-57, President, 1957-58, President, 1958-59, President, 1959-60, President, 1960-61, President, 1961-62, President, 1962-63, President, 1963-64, President, 1964-65, President, 1965-66, President, 1966-67, 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airway to 1938 fuel and spare parts for the airplane, weather service and means of communication were all provided for. Again the efficiency of a fairly important airway was proved. The materials were transported in three phases by land and by water. In both cases the means of transportation on land or water were ordinary and wholly suitable to the

The meaning of the world fight is just beginning to be understood in its far-reaching consequences. We have seen that airplanes can go wherever we can establish an airway. Wherever air power is it can dominate the sea areas and have a great influence on the military operations on land.

to New York University. The idea of this donation originated

with Frank H. Russell, and his personal viewpoint was made over the Executive Committee of the company to the general public.

The Department of Aeronautics at New York University has already produced some promising young graduates in Aeronautical Engineering and there is no doubt that the inclusion of a wind tunnel as part of the equipment will greatly stimulate the work of instruction and benefit the students.

The tunnel has been conditioned this summer, and shows steadiness and uniformity of wind flow in its 4 ft by 4 ft section, a speed of 60 mi./hr being obtainable at maximum power, and results of tests checking closely with those of other laboratories.

TC2 Wrecked by Bomb

Resulting from the premature explosion of one of the bombs the plane was carrying, the Army's largest two-engine lighter-than-air craft built in the United States, the TCG, was wrecked and several of her crew were injured Oct. 19 when she crashed to earth from a height of 150 ft. at Langley Field.

Lt. Col. R. M. Martin, pilot, and Lt. Col. Alfred I. Fugate, observer, were seriously injured and three enlisted men were slightly hurt.

Lieutenant Martin has a fracture at the base of the lower
 but still has a fighting chance for life.
 The woman had been sent from her station at Aberdeen

Md., to participate in an exercise maneuver at Langley Field and had taken on her cargo of four bombs.

At the time of the explosion the TCE was about 150 ft. in the air. For the first few seconds the craft fell slowly, but spectators below soon saw a puff of smoke, heard a muffled roar and then the hiss of gas. The "blimp" bursted plume-like to earth. She did not catch fire, but struck the ground with great force.

The explosion of the bomb broke the gas bag and the inflammable mixture with which the bag was filled escaped. The blimp itself did not explode but still kept its shape.

The collected men around the shock were Master Sergeant William F. Fitch of Philadelphia, Sergeant Elmer J. Webb of Abbeville, S.C., and Corporal George W. Brown of Abbeville, S.C.

All five of the injured men were rushed to the base hospital at Fort Meade by airplane and ambulance for examination.

The TCI is one of three shops built for the government by the Goodyear Tire & Rubber Co. of Akron. The TCI had a length of 195 ft. and an over all height of 22 ft. She was

She had a speed of 80 mi/hr., and an endurance capacity of 10 hr on air at that rate. Her total lifting capacity was close to 12,980 lb., and her useful load 4,000 lb. A detailed description of the TCI will be found in our issue of April 3, 1953.

Crack Not Due to Failure of Steel Fuzelage

The Chief of the Engineering Division, McCook Field, Dayton, Ohio, states that word came to him about the crash of the plane widely spread throughout the service that the crash of Lieutenant Barabeside near Fairfield, Ohio, on the COV on May 12 last was due to failure of the new steel tube fuselage. This is not in accordance with the facts in the case. So, as shown in the findings of the Board investigating this accident, the failure causing the crash was in the stabilizer.

Score Tables of the Dayton Air Races

Lap Times of Contestants in All Flying Events

ON TO DAYTON RACE

Entrant	Plane	Pilot	No. of Pass.	Engines	Crewed (Formula)	Fuel of Departure	Distance mi.	File
Curtiss Expedition Co.	Curtiss Oriole	Charles S. Jones	2	Curtiss CB	14617	Franklin, O.	8703	220
Aust-Cliff of Lancaster	T.M. Type BMC	Charles Heston	2	Curtiss ORS	1267	St. Louis, Mo.	1690	220
M. M. Merrill	Czechosk Special	M. M. Merrill	—	Curtiss OX8	12657	Dallas, Tex.	8703	220
Taylor Aircraft Co.	Tucker Sport	H. H. Hoyle	1	Curtiss OX4	1257	Chicago	248	248
Taylor Aircraft Co.	Laird Newline	W. A. Yackley	1	OX8	1267	Chicago	1690	220
Rod L. Jones	SVA	Daniel L. Brown	1	Carlson CB	14617	Warren, Ohio	248	248
E. A. McKee	Special Canadian	D. A. Ashby	1	Carlson OX8	12657	Lafayette, Ohio	800	1000
A. J. Morrison	Swallow 3 place	A. E. Morrison	1	Curtiss OXK	1417	Wesley, Kans.	700	700
Swallow Air Mfg. Co.	Swallow 3 place	John C. Bowman	1	Curtiss OX8	12657	Kent, Ohio	700	700
Swallow Air Mfg. Co.	Swallow 3 place	Ed Bush	1	Curtiss OX8	1257	Bt. Joseph, Mo.	595	597
West Virginia Co., Inc.	Hoath Favorite	E. B. Hoath	2	Curtiss OX4	1257	Chicago	242	273
William "Special Sport"	Portage	Robert Horvath	1	Agusta	86	Uniontown, Pa.	546	555
J. P. Lakey	Laird Swallow	E. L. Partridge	4	Bison	12922	Chicago	242	248
Mayer Aircraft Corp.	Swallow	W. W. Cleveland	2	Curtiss OX8	1257	Rockledge, Pa.	390	345
De La Roche	Negron-Say Traveler	Le Rochelle	1	Curtiss OXS	1257	Kearney City, Mo.	380	361
C. Caldwell	T.M. Type BMC	C. Caldwell	—	LaRoche	12657	Three Rivers, Ont., Can.	700	745
Reese Turner	Curtiss TRND	Reese Turner	1	Curtiss OX5	1257	Franklin, Tenn.	380	342
Swallow Air Mfg. Co.	Swallow Special	Edward R. Hoosh	1	OX8	12702	Wesley, Kans.	700	700
Swallow Flying Corp.	Swallow CB	E. F. Scott	1	BMW	20113	Garland City, La.	592	593
C. D. Collier	SESA	C. D. Collier	—	Whitely-Vigor	—	—	—	—
Mason & Venturini	Avco 504 K	J. V. Ferrell	1	LaRoche	22047	Highgate, Mass.	—	—
M. S. Ferguson	Lanette St. Roadster	B. B. Ferguson	1	Hoopston-Hoon 34	17072	Chicago	242	125

NATIONAL CASH REGISTER COMPANY TROPHY RACE

DHEANOE, 94 MILLS

Physical Media Course—4 ECTS

Fuel	Phase	No.	Engine	Circulation		T		S		A		L		L	
				(Formula)	Hp	Press	° F	Temp	Levs	Levs	Levs	Levs	Levs	Levs	Levs
Waller Lake	Harriet PCB	57	Curtiss C-65	100	107	3rd	51.7	80.2	81.3	82.3	83.3	84.3	85.3	86.3	87.3
Theriot	Lowland	58	Curtiss C-65	100	107	3rd	50.1	80.3	80.3	81.3	82.3	83.3	84.3	85.3	86.3
K. G. Page	Yachey Spout	20	Curtiss C-65	100	107	3rd	57.6	82.8	84.1	85.3	86.3	87.3	88.3	89.3	90.3
R. J. Zukowski	New Bendish	7	Curtiss C-65	100	107	3rd	51.6	84.2	86.6	87.9	89.1	90.3	91.3	92.3	93.3
Walter H. Beech	New Bendish	9	Curtiss C-65	100	107	3rd	52.0	84.2	86.6	87.9	89.1	90.3	91.3	92.3	93.3
John L. Beech	New Bendish	10	Curtiss C-65	100	107	3rd	52.0	84.2	86.6	87.9	89.1	90.3	91.3	92.3	93.3
D. A. Asher	Can. Curtiss	28	Curtiss C-65	100	107	3rd	60.5	78.8	81.7	83.3	84.3	85.3	86.3	87.3	88.3
John L. Hume	CNS Spread	28	Curtiss C-65	100	107	3rd	61.5	81.4	84.3	86.6	87.9	89.1	90.3	91.3	92.3
E. W. Cleveland	Lacert Bendish	35	Curtiss C-65	100	107	3rd	61.5	78.8	81.7	83.3	84.3	85.3	86.3	87.3	88.3
John L. Hume	Can. Curtiss	28	Curtiss C-65	100	107	3rd	61.5	78.8	81.7	83.3	84.3	85.3	86.3	87.3	88.3
W. M. Murray	TM Type 34C	13	Curtiss C-65	100	107	3rd	56.0	80.3	81.3	82.3	83.3	84.3	85.3	86.3	87.3

CENTRAL LABOR UNION TROPHY RACE

DISTANCE, 100 MILES

Fifteen Mile Creek—E. La

Point	Name	No.	Combined (Per-		1	2	3	4	5	6	7	8	9	10
			centage)	Points										
Charles B. Jones	Orlando	35	Orlando CE	145.1	1st	113.9	1st	122.1	1st	125.6	1st	124.4	1st	122.5
W. C. Hunt	Orlando	38	Orlando CE	144.5	2d	113.9	1st	124.6	1st	124.6	1st	124.6	1st	124.6
Criss C. Caldwell	O. L. Martin	79	Wright	138.4	1st	93.3	9th	124.6	1st	124.6	1st	124.6	1st	124.6
Walker Lee	Hartford	17	Orlando CE	136.7	9th	98.8	53.3	124.6	1st	124.6	1st	124.6	1st	124.6
Perry Hinton	Local Commercial	6	Orlando CE	132.7	3d	98.8	53.3	124.6	1st	124.6	1st	124.6	1st	124.6
A. T. Taylor	Orlando	2	Orlando CE	124.5	1st	98.8	53.3	124.6	1st	124.6	1st	124.6	1st	124.6
A. E. Johnson	New Knoxville	9	Orlando CE	125.7	7th	91.1	8th	124.6	1st	124.6	1st	124.6	1st	124.6
Walter H. Beach	Swanwick Hospital	18	Edgemoor-Peers	117.2	7th	91.1	8th	124.6	1st	124.6	1st	124.6	1st	124.6
Ed. Burns	C. S. Speed	24	Orlando CE	125.7	7th	91.1	8th	124.6	1st	124.6	1st	124.6	1st	124.6
W. L. L. Jones	W. A.	39	W. A.	143.1	1st	94.6	6th	124.6	1st	124.6	1st	124.6	1st	124.6
E. G. Jones	Tucker Report	21	Orlando CE	139.7	7th	94.6	6th	124.6	1st	124.6	1st	124.6	1st	124.6

LIBERTY ENGINE BUILDERS' TROPHY RACE

DISTANCE, 100 MILES
Fifteen Mile Course—12 Laps

Pilot	Plane	No. Engine	Fly Place	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120	121	122	123	124	125	126	127	128	129	130	131	132	133	134	135	136	137	138	139	140	141	142	143	144	145	146	147	148	149	150	151	152	153	154	155	156	157	158	159	160	161	162	163	164	165	166	167	168	169	170	171	172	173	174	175	176	177	178	179	180	181	182	183	184	185	186	187	188	189	190	191	192	193	194	195	196	197	198	199	200	201	202	203	204	205	206	207	208	209	210	211	212	213	214	215	216	217	218	219	220	221	222	223	224	225	226	227	228	229	230	231	232	233	234	235	236	237	238	239	240	241	242	243	244	245	246	247	248	249	250	251	252	253	254	255	256	257	258	259	260	261	262	263	264	265	266	267	268	269	270	271	272	273	274	275	276	277	278	279	280	281	282	283	284	285	286	287	288	289	290	291	292	293	294	295	296	297	298	299	300	301	302	303	304	305	306	307	308	309	310	311	312	313	314	315	316	317	318	319	320	321	322	323	324	325	326	327	328	329	330	331	332	333	334	335	336	337	338	339	340	341	342	343	344	345	346	347	348	349	350	351	352	353	354	355	356	357	358	359	360	361	362	363	364	365	366	367	368	369	370	371	372	373	374	375	376	377	378	379	380	381	382	383	384	385	386	387	388	389	390	391	392	393	394	395	396	397	398	399	400	401	402	403	404	405	406	407	408	409	410	411	412	413	414	415	416	417	418	419	420	421	422	423	424	425	426	427	428	429	430	431	432	433	434	435	436	437	438	439	440	441	442	443	444	445	446	447	448	449	450	451	452	453	454	455	456	457	458	459	460	461	462	463	464	465	466	467	468	469	470	471	472	473	474	475	476	477	478	479	480	481	482	483	484	485	486	487	488	489	490	491	492	493	494	495	496	497	498	499	500	501	502	503	504	505	506	507	508	509	510	511	512	513	514	515	516	517	518	519	520	521	522	523	524	525	526	527	528	529	530	531	532	533	534	535	536	537	538	539	540	541	542	543	544	545	546	547	548	549	550	551	552	553	554	555	556	557	558	559	560	561	562	563	564	565	566	567	568	569	570	571	572	573	574	575	576	577	578	579	580	581	582	583	584	585	586	587	588	589	590	591	592	593	594	595	596	597	598	599	600	601	602	603	604	605	606	607	608	609	610	611	612	613	614	615	616	617	618	619	620	621	622	623	624	625	626	627	628	629	630	631	632	633	634	635	636	637	638	639	640	641	642	643	644	645	646	647	648	649	650	651	652	653	654	655	656	657	658	659	660	661	662	663	664	665	666	667	668	669	670	671	672	673	674	675	676	677	678	679	680	681	682	683	684	685	686	687	688	689	690	691	692	693	694	695	696	697	698	699	700	701	702	703	704	705	706	707	708	709	710	711	712	713	714	715	716	717	718	719	720	721	722	723	724	725	726	727	728	729	730	731	732	733	734	735	736	737	738	739	740	741	742	743	744	745	746	747	748	749	750	751	752	753	754	755	756	757	758	759	760	761	762	763	764	765	766	767	768	769	770	771	772	773	774	775	776	777	778	779	780	781	782	783	784	785	786	787	788	789	790	791	792	793	794	795	796	797	798	799	800	801	802	803	804	805	806	807	808	809	810	811	812	813	814	815	816	817	818	819	820	821	822	823	824	825	826	827	828	829	830	831	832	833	834	835	836	837	838	839	840	841	842	843	844	845	846	847	848	849	850	851	852	853	854	855	856	857	858	859	860	861	862	863	864	865	866	867	868	869	870	871	872	873	874	875	876	877	878	879	880	881	882	883	884	885	886	887	888	889	890	891	892	893	894	895	896	897	898	899	900	901	902	903	904	905	906	907	908	909	910	911	912	913	914	915	916	917	918	919	920	921	922	923	924	925	926	927	928	929	930	931	932	933	934	935	936	937	938	939	940	941	942	943	944	945	946	947	948	949	950	951	952	953	954	955	956	957	958	959	960	961	962	963	964	965	966	967	968	969	970	971	972	973	974	975	976	977	978	979	980	981	982	983	984	985	986	987	988	989	990	991	992	993	994	995	996	997	998	999	1000	1001	1002	1003	1004	1005	1006	1007	1008	1009	1010	1011	1012	1013	1014	1015	1016	1017	1018	1019	1020	1021	1022	1023	1024	1025	1026	1027	1028	1029	1030	1031	1032	1033	1034	1035	1036	1037	1038	1039	1040	1041	1042	1043	1044	1045	1046	1047	1048	1049	1050	1051	1052	1053	1054	1055	1056	1057	1058	1059	1060	1061	1062	1063	1064	1065	1066	1067	1068	1069	1070	1071	1072	1073	1074	1075	1076	1077	1078	1079	1080	1081	1082	1083	1084	1085	1086	1087	1088	1089	1090	1091	1092	1093	1094	1095	1096	1097	1098	1099	1100	1101	1102	1103	1104	1105	1106	1107	1108	1109	1110	1111	1112	1113	1114	1115	1116	1117	1118	1119	1120	1121	1122	1123	1124	1125	1126	1127	1128	1129	1130	1131	1132	1133	1134	1135	1136	1137	1138	1139	1140	1141	1142	1143	1144	1145	1146	1147	1148	1149	1150	1151	1152	1153	1154	1155	1156	1157	1158	1159	1160	1161	1162	1163	1164	1165	1166	1167	1168	1169	1170	1171	1172	1173	1174	1175	1176	1177	1178	1179	1180	1181	1182	1183	1184	1185	1186	1187	1188	1189	1190	1191	1192	1193	1194	1195	1196	1197	1198	1199	1200	1201	1202	1203	1204	1205	1206	1207	1208	1209	1210	1211	1212	1213	1214	1215	1216	1217	1218	1219	1220	1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E. B. Reuland with passenger, in D.M.W. Standard, from Hollywood, Calif.
 F. M. Byrne with 2 passengers, in K8 Oriole, from Buffalo, N. Y.
 H. B. Shaw with passenger, in OES Standard, from Madison, Wis.
 Ives McCannan, in OES JN, from Tuscarora, Tex.
 A. F. Smith and passenger, in OES JN, from Middletown, N. Y.
 Edith Hamilton with 6 passengers, in Stout Air Pelican, Lakely II, from Detroit, Mich.
 E. K. Throston and passenger, in CH Oriole, from Detroit, Mich.
 W. E. Evers with passenger, in OES Consul, from Bradford, Pa.
 J. Schumacher with passenger, in OES JN, from Indianapolis.
 C. H. Banton with passenger, in Hemo JN, from Dayton, Ohio.
 P. J. Little with 2 passengers, in Scampier Bee, from Cleveland.
 L. M. Kohn with 2 passengers, in OESX Aeromarine 308, from Philadelphia, Pa.
 W. D. Maycock with passenger in OES Standard from Detroit, Mich.
 P. Cramer with passenger, in OES JN, from Oak City, Pa.
 Gaudin: Weaver with passenger, in OES Consul, from Washington, D. C.
 H. H. Warrick with 2 passengers in Hemo Standard from Minneapolis, Minn.
 D. Welch with 2 passengers, in OESX Standard, from Marquette, Ohio.
 W. H. Reed with passenger, in Hemo Standard, from Chicago, Ill.
 J. P. Wood, in Hemo Standard, from Star State Gap, Va.
 F. W. Fenn with passenger, in LaRocca Aero, from Star State Gap, Va.
 John W. Miller, in OES Consul, from Bozerville, Md.
 G. Gehring, in OES Curtiss, from Columbus, Ohio.
 A. H. Milne with passenger, in OES Curtiss, from Hingham, W. Va.
 P. G. Gould with 2 passengers, in Hemo Lancia Standard, from Dayton.
 E. C. Ferguson, in OES Standard, from Cleveland, Ohio.
 W. Y. Adams, in 388 Fiat Coker-Crewer, from Mexico, D. F.
 W. E. Borden, in OES Curtiss, from Columbus.

N. McCray with passenger, in OES JN from Fairview, Pa.
 F. K. Cherry with passenger, in OES Vought, from Cincinnati, Ohio.
 Richard Dewey, in Wright R4 Mail Daland, from New York.
 T. L. Hearn, in OES Thomas Morse, from Chicago.
 E. M. Elavick, in OES Standard.

Charts for Graphical Estimation of Airplane Performance

NACA, Report No. 192

This report by Walter S. Dinkel, which was prepared at the request of the National Advisory Committee for Aeronautics, contains a series of charts which were developed in the Bureau of Aeronautics of the Navy Department in order to simplify the estimation of airplane performance. Charts are given for estimating propeller diameter and efficiency, maximum speed, stall rate of climb, absolute ceiling, service ceiling, climb to 10,000 ft, time to climb to any altitude, maximum speed at any altitude, and endurance. A majority of these charts are based on the equations given in NACA Technical Report No. 179. Photo of pressure and density against altitude is standard as are also given for compression. In most of charts, the data shown are for standard day conditions when necessary. In some cases, actual rate of climb, absolute ceiling, and speed at altitude are approximations subject to considerable error under certain conditions. These particular charts should not be used as a substitute for detailed calculations when accuracy is required, as, for example, in military or naval proposals. Report 192 is available for reference in the library of the NACA.

Wind Tunnel Tests of TA4

A.S.T.C. No. 63

This report prepared by A. L. Morse of the Engineering Division, McCook Field, gives a summary with charts of the results of wind tunnel tests conducted at N.T.C. on the TA4 in wind speeds of 100, 150, 200, 250, 300, 350, 400, 450, 500, 550, 600, 650, 700, 750, 800, 850, 900, 950, 1000, 1050, 1100, 1150, 1200, 1250, 1300, 1350, 1400, 1450, 1500, 1550, 1600, 1650, 1700, 1750, 1800, 1850, 1900, 1950, 2000, 2050, 2100, 2150, 2200, 2250, 2300, 2350, 2400, 2450, 2500, 2550, 2600, 2650, 2700, 2750, 2800, 2850, 2900, 2950, 3000, 3050, 3100, 3150, 3200, 3250, 3300, 3350, 3400, 3450, 3500, 3550, 3600, 3650, 3700, 3750, 3800, 3850, 3900, 3950, 4000, 4050, 4100, 4150, 4200, 4250, 4300, 4350, 4400, 4450, 4500, 4550, 4600, 4650, 4700, 4750, 4800, 4850, 4900, 4950, 5000, 5050, 5100, 5150, 5200, 5250, 5300, 5350, 5400, 5450, 5500, 5550, 5600, 5650, 5700, 5750, 5800, 5850, 5900, 5950, 6000, 6050, 6100, 6150, 6200, 6250, 6300, 6350, 6400, 6450, 6500, 6550, 6600, 6650, 6700, 6750, 6800, 6850, 6900, 6950, 7000, 7050, 7100, 7150, 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Publisher's News Letter

The financial side of the news at Dayton should receive most careful consideration by the N.A.A. The local committee may feel that the responsibility that they assumed is purely a matter of their own concern and they would be perfectly right in taking this position. Those who have a broad national interest in aviation news will feel, however, that the functioning of a meet by the N.A.A. should require some general statement of the expenditures anticipated and after the meet a detailed report of the financial results received. The purpose of these reports would be for the guidance of other meets. The same reason holds true for all meets sanctioned by the N.A.A. The number of meets that are held each year involves large expenditures and if they are successful financially the means for this should be made available in other cities. In the same way the reasons for any losses should be recorded so that they may be avoided in future meets. We now have the experience of Detroit, St. Louis and Dayton for future guidance. They should be given careful study by the Race Committee so that these meets will have the greatest possible chance for financial success.

* * * * *

The Dayton Meet was the first to ignore the possibilities of the aeronautical press for advertising the meet. Detroit and St. Louis told the flying fraternity they were in the aviation papers. Dayton neglected this form of publicity which lost because the accepted method of advertising aviation people. In this connection it may be of interest to show how completely the publicity activities were dominated by the military supervisors. In the "Guide for visiting newspaper men" they were informed:

In view of the fact that the air theme this year has been held on a military field there are certain restrictions which the visiting newspapermen must observe in order that our team accordingly can present us to you.

Representative men, carrying press badges, will be admitted to privileges on the field as far as the press and their team. This privilege will be the absolute limit for the press and photographers. After that a very strict rule will be enforced. No one is to be admitted to the field except by the Team's Board, which is held to the press stand for interviews by the members of the press. Only those photographs which are about airplanes or action shots can be taken on the flighted area and within this group is in front of the Team's Board.

What did we expect the completion of a Press Association of the public relations committee will be the only group allowed from access to the government area in the future. Let us hope that this group will be the only group to be allowed to the field. The Committee is giving news for interview. We will be the only group to be allowed to the field. The Committee is giving news for interview. We will be the only group to be allowed to the field.

In the midst of a crash or something of great importance in the flying field, the press is to be kept in the field, receive the information and report back to the Press

stand. Photographers, under an arrangement, will be allowed on the field at any point and again only in the direct line of the line in an area that will be needed.

The above drastic rules did not apply to the representatives of AVIATION but are needed so that in the future, managers of meets will know how not to handle newspaper men. It also shows why there were so few good pictures of the meet available for publication.

* * * * *

Our readers have been given a real treat in the observations of Charles Gey, Editor of *The Aeroplane*, who as a guest contributor of AVIATION is giving his impressions of American aeronautics such work. In these articles he has not been handicapped by any limitations and therefore his opinions should be accepted as entirely his own and not necessarily those of AVIATION. The only comment that seems advisable at this time is to express the wish that there was someone in this country with the information and ability to express it as astutely as Mr. Gey. Next week we have asked him to use this page to give his views on aeronautical publishing.

* * * * *

The opinion that prevails concerning the advancement of aeronautics during the coming year seems to be spreading all over the country. The newspapers are printing more news than ever before. The *Around the World Flight* had hardly ended when the *Shenandoah* and the ZRS publicity started so that the first page of practically every newspaper in the country has been given aeronautical information to the people of the country in such concise form that the reader need have their effect on the Administration and Congress.

Too much emphasis is being laid on increasing the appreciation. While this is of prime importance, it is of greater practical value to know that of appreciation are made they will be spent, as has not been the case recently in the Air Service. And equally necessary is a continuing program of publicization over several years showing what progress, knowledge, observation and training shows are now desired and in what quantities. The growing importance of aircraft and the recognition of the public interest in adequate aerial defense should cause the whole air program of this country to be investigated thoroughly and by impartial standards. In this way, only can the great interest aroused by the *Round the World* expedition and the dirigible ventures be properly translated into genuine progress.

A Suggested National Air Policy

That a National Aviation Policy is needed by the United States is obvious. To get such a policy in concrete form AVIATION requested several thoughtful friends of aeronautical progress to make suggestive and constructive recommendations. Some of them are given below and will be printed each week with additions, omissions and such other changes as appear to be helpful toward the formulation of a sound national air policy. Readers of AVIATION and others can render no greater service to the cause of aeronautical progress than contributing their comments and suggestions.

GOVERNMENTAL.

- A continuing program of aircraft development both governmental and commercial.
- A civilian, charged with recommending a national air policy, is needed in the Government. *Colonel Raymond Chandler, of the House and Senate to hold aircraft hearings where civilians as well as government officials can express their opinions. *Fostered by laws.
- A detailed aircraft budget for all Governmental Departments, and an annual statement of all expenditures.
- An experienced staff of flying officers at the head of all governmental air defense services.
- Coordination of all governmental and experimental aircraft work of the government under one agency.
- *Co-ordination of the aircraft experimental development of the government having procurement in the various branches therewith.
- Limitation of government manufacture to repair of aircraft and specialized work that cannot be done by private firms. *No limitation on experimental construction.
- The elimination of the duplication of aerial functions and facilities by government departments.
- A country wide Air Mail system of trunk lines connecting the principal cities of the country. *Retention here for our mail policy.
- Establishment of a National Airway System through cooperation of the Federal Government with States and Cities. *A landing field in every large city.
- A national aircraft law that will regulate aviation, administered by practical pilots and experienced aeronautical engineers. *and Federal air police.
- Membership of the United States in the International Convention for Air Navigation.
- *Increased governmental appropriations for aerial development.
- *Encouragement of aviation rather than publicity.

COMMERCIAL AIRCRAFT OPERATION.

- Creation of commercial air lines by private enterprise or government subsidy.
- Encouragement of participation by private companies in aircraft races and competitions.
- Encouragement of the training of pilots by civilian schools.
- Creating an Export Air Corps, sending flying units all over the country by frequent gatherings at aviation meets.
- *Encouragement of safe and sane flying.
- *A continuing organization, including representation of all important points of view in aeronautics, for the discussion of standards for aeronautics where standardization is desirable.

INDUSTRIAL AIRCRAFT CONSTRUCTION.

- Recognition that a sound aeronautical industry is a prime necessity of our National Defense.
- An active industrial association that will coordinate the aircraft industry and defend it from attack.
- Encouragement of the designing of new types of aircraft by manufacturers by allowing them to retain their proprietary rights.
- Concentration of manufacturing firms on specialized types of army and navy aircraft. *When production demands are heavy.
- Encouragement of research by construction, universities and other agencies as well as by the government.
- Encouragement of an annual design competition for commercial aircraft.

CIVILIAN.

- A national aeronautical organization composed of public spirited citizens that will take a strong position of leadership in national aeronautical policy. *Unification of all aeronautical organizations into one national association with chapters in all cities and towns.
- An Annual Aviation Week during which the country will think of aerial progress. *52 such weeks.
- The formation of local aero clubs by firms for the purpose of stimulating flying in all locations.
- Encouraging the public to fly and patronize the air mail and transport facilities.
- *The encouragement of flying and saving statistics, especially inexperienced.

*Suggested changes.

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This same plane was the winner in the same event last year and scored second place in the Dayton race the year before last. This is a remarkable record for dependability.

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